



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**Attorney Docket No. 15979US01**

In the Application of:

Martin Morris

U.S. Serial No.: 09/844,625

Filed: April 27, 2001

For: SYSTEM AND METHOD FOR  
CONNECTING BLUETOOTH-  
ENABLED DEVICES TO A  
PERSONAL COMPUTER

Examiner: Andrew Lee

Group Art Unit: 2663

Confirmation No.: 2405

Customer No.: 23446

**U.S.P.S. EXPRESS MAIL MAILING  
LABEL NO. EV 639 811 536 US**

**Date: January 17, 2006**

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This paper is an appeal brief that is being filed in a timely manner with a request for two-month extension of time. A notice of appeal was received by the United States Patent and Trademark Office on September 15, 2005. A request for a two-month extension of time extends the deadline by which to file an appeal brief to Tuesday, January 17, 2006 since Monday, January 16, 2006 is a federal holiday and January 15, 2006 falls on a Sunday.

01/19/2006 BABRAHA1 00000023 130017 09844625

02 FC:1402 500.00 DA

## **REAL PARTY IN INTEREST**

Broadcom Corporation, a corporation organized under the laws of the state of California and having a place of business at 16215 Alton Parkway, Irvine, California 92618-3616, is a real party in interest. Broadcom Corporation acquired Widcomm, Inc., a California corporation and surviving corporation of a merger of Widcomm, Inc. and WC Acquisition Corp., a California corporation and wholly owned subsidiary of Broadcom Corporation. WC Acquisition Corp. is listed as the assignee as set forth in the Assignment filed and recorded at Reel 015108, Frame 0950.

## **RELATED APPEALS AND INTERFERENCES**

There are currently no appeals pending regarding related applications.

## **STATUS OF THE CLAIMS**

Claims 1-28 are pending in the present application. Pending claims 1-28 have been rejected under 35 U.S.C. § 102(e) and are the subject of this appeal.

## **STATUS OF THE AMENDMENTS**

There are no amendments pending in the present application.

## **SUMMARY OF THE INVENTION**

Some embodiments according to some aspects of the present invention may provide an interface unit that effects communication between a device and an electronic system. The interface unit may include, for example, a device communication module, a system communication module and a translation unit. The device communication module may communicate with the device over a wireless link in accordance with a first protocol. The system communication module may communicate with the electronic system using a second protocol. The translation unit, operatively connected to the device communication module and to the system communication module, may translate data received from the device in accordance with the first protocol into translated data adapted

for the electronic system in accordance with the second protocol. The electronic system does not have to be aware of the first protocol to be in communication with the device.

Some embodiment according to some aspects of the present invention may provide a method that effects communication between a device and an electronic system. The method may include, for example, communicating with the device over a wireless link in accordance with a first protocol; communicating with the electronic system using a second protocol, the electronic system not having to be aware of the first protocol to be in communications with the device; and translating data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol.

Some embodiments according to some aspects of the present invention may provide a system that effects communication with a device over a wireless link in accordance with a first protocol. The system may include, for example, a personal computer and an interface unit. The personal computer may have an interface compliant with a second protocol. The interface unit may be in communication with the personal computer through the interface. The interface unit may include, for example, a device communication module, a system communication module and a translation unit. The device communication module may transmit information to, and receiving data from, the device in accordance with the first protocol. The system communication module may communicate with the personal computer using a second protocol. The translation unit, operatively connected to the device communication module and to the system communication module, may translate the data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol. The personal computer does not have to be aware of the first protocol to be in communication with the device.

Some embodiments according to some aspects of the present invention may provide a computer-readable storage medium containing code for controlling an interface unit disposed to effect communication between a device and an electronic system and may include, for example, a device communication routing, a system communication routing and a translation routine. The device communication routine may control communication with the device over a wireless link in accordance with a first protocol.

The system communication routine may control communication with the electronic system using a second protocol. The translation routine may translate data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol. The electronic system does not have to be aware of the first protocol to be in communication with the device.

### **ISSUES FOR REVIEW**

Whether claims 1-28 are unpatentable under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,255,800 B1 to Stephan Bork (“the Bork patent”).

### **GROUPING OF CLAIMS**

Claims 1-28 do not stand or fall together.

Group I. Claims 1-5, 10-13, 16-20 and 24-27 stand or fall together.

Group II. Claims 6 and 21 stand or fall together.

Group III: Claims 8 and 23 stand or fall together.

Group IV. Claim 9 stands or falls by itself.

Group V: Claims 14 and 15 stand or fall together.

Group VI: Claims 7, 22 and 28 stand or fall together.

### **ARGUMENT**

#### **I. Group I: Claims 1-5, 10-13, 16-20 and 24-27**

Claims 1-5, 10-13, 16-20 and 24-27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Bork patent.

Independent claims 1 and 24 recite, in part, “wherein the electronic system does not have to be aware of the first protocol to be in communication with the device”. Independent claim 11 recites, in part, “the electronic system not having to be aware of the first protocol to be in communications with the device”. Independent claim 16 recites, in part, “wherein the personal computer does not have to be aware of the first protocol to be

in communication with the device”. Appellant respectfully submits that the Bork patent does not describe at least these elements as set forth in independent claims 1, 11, 16 and 24.

In the Office Action Made Final of June 22, 2005 (“the Final Office Action”) at page 4, the Examiner states that “the electronic system does not have [to] be aware of the first protocol to be in communication with the device because the protocol translation is performed by the Bluetooth USB Firmware. Since Bluetooth USB firmware is already in place to provide protocol translation, the electronic device does not need to be aware of the first protocol of the device.” Final Office Action at page 4.

Appellant respectfully submits that the logical argument presented in the Final Office Action makes assumptions not described in the Bork patent. For example, just because the Bork patent describes a USB driver 62 with Bluetooth USB firmware and a USB device controller, as illustrated in FIG. 19, it does not necessarily follow that the electronic system (which is alleged to be portable computer 70) does not have to be aware of the first protocol (which is alleged to be the Bluetooth protocol). Appellant respectfully notes that the Final Office Action did not provide a citation to the Bork patent which clearly demonstrates that “[s]ince, Bluetooth USB firmware is already in place to provide protocol translation, the electronic device does not need to be aware of the first protocol of the device”. See Final Office Action at page 4 (without citation to the Bork patent). Accordingly, Appellant respectfully submits that the Examiner has not provided evidence in the Bork patent that the portable computer 70 or PC 10, for example, does not have to be aware of the first protocol to be in communication with the device.

In fact, the portable computer 70 or PC 10 is aware of the Bluetooth protocol (which is alleged to be the first protocol). FIG. 19 of the Bork patent is substantially relied upon as evidence by the Examiner; however, it is shown in FIG. 19 of the Bork patent that PC HCI Library of the portable computer 70 is in communication with Bluetooth HC of cradle 46; and USB Function Driver of the portable computer 70 is in communication with Bluetooth USB Firmware. FIG. 19 of the Bork patent suggests that the portable computer 70 is aware of the Bluetooth protocol.

FIG. 18 of the Bork patent also provides rebuttal evidence that the portable computer 70 or PC 10 is aware of the Bluetooth protocol during communications with the device. According to the Bork patent, “FIG. 18 illustrates a high level block diagram of the relevant portions of personal computer 10 that enable the computer to communicate with the Bluetooth radio in cradle 46”. In particular, FIG. 18 illustrates a Bluetooth Adviser 68. Appellant respectfully submit that, if the computer 10 has a Bluetooth Adviser, then the computer 10 is aware of the Bluetooth protocol.

The specification of the Bork patent with respect to FIG. 18 also states the following:

**Computer 10** also **requires** Bluetooth profiles 60, such as found in the Bluetooth Profile Specification, which can be found at [www.Bluetooth.com](http://www.Bluetooth.com) or [www.Bluetooth.net](http://www.Bluetooth.net), hereby incorporated by reference, which are applications that insure compatibility between devices—not just at the physical layer or protocol layer, but compatibility at the application layer so that if, for example, data synchronization is required, the computer knows how to do data synchronization with mobile device 54 (see for example, FIG. 21 in the Profile Stack section on page 171 of the Bluetooth Profile Specification). Computer 10 can be enhanced by the addition of an application 60 that enables the user to configure, control, and use all Bluetooth devices that are connected to a computer (e.g., application such as Bluetooth Advisor—see WinHEC 99 White Paper submitted herewith, or Bluetooth Neighborhood—see also [www.Bluetooth.net](http://www.Bluetooth.net)). In the event that computer 10 is to be coupled to cradle 46 via a Universal Serial Bus “USB”, the computer 10 also requires a USB driver 62 in addition to a PC operating system 61, such as Microsoft’s Windows 98.

The Bork patent at col. 6, lines 26-36 (bold and underlining of “Computer 10” and “requires” added for emphasis). Appellant respectfully submits that, since the computer 10 requires Bluetooth profiles, the computer 10 is aware of the Bluetooth protocol.

Applicant respectfully submits that, since PC 10 requires (i.e., it is not optional so as to permit the Examiner’s alleged characterization of the Bluetooth USB Firmware as set forth in the Final Office Action at page 4) Bluetooth profiles 60 and other Bluetooth applications to “insure compatibility between devices—not just at the physical layer or protocol layer, but compatibility at the application layer”, the electronic system (which is

alleged to be the PC 10) has to be aware of the first protocol (which is alleged to be the Bluetooth protocol).

To maintain an anticipation rejection, each and every element as set forth in independent claims 1, 11, 16 and 24 must be described in the Bork patent. For at least the above reasons, Appellant respectfully submits that each and every element as set forth in independent claims 1, 11, 16 and 24 is not described in the Bork patent.

It is therefore respectfully requested that the Board reverse the rejection with respect to claims 1-5, 10-13, 16-20 and 24-27.

## **II. Group II: Claims 6 and 21**

Claims 6 and 21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Bork patent.

The arguments made above in section I with respect to claims 1 and 16, from which claims 6 and 21 depend, respectively, are incorporated herein and made with respect to claims 6 and 21. For at least these reasons, the Board is urged to reverse the rejection with respect to claim 6 and 21.

In the Final Office Action at page 3, the Examiner alleges that “Re Claims 6, 21, refer to Claim 1, wherein Bluetooth operates TDM, hence, it is inherent that the fig. 19 includes a Bluetooth MUX/DEMUS arrangement to connected to the Bluetooth/USB firmware”.

Appellant respectfully challenges the assertion that the elements in claims 6 and 21 in combination with claims 1 and 16, respectively, are all inherent. Appellant believes that the Examiner improperly applied the doctrine of inherency.

The well-known patent law treatise by Donald S. Chisum states that Federal Circuit decisions emphasize that an anticipatory inherent feature or result must be consistent, necessary, and inevitable, not merely possible.

Chisum on Patents § 3.03[2][b] (December 2004).

In addition, the United States Court of Appeals for the Federal Circuit (“the Federal Circuit”) has stated that

anticipation by inherent disclosure is appropriate only when the reference discloses prior art that must *necessarily* include the unstated limitation ....

Transclean Corp. V. Bridgewood Services, Inc, 290 F.3d 1364, 1373, 62 U.S.P.Q. 2d 1865 (Fed. Cir. 2002).

Furthermore, the Federal Circuit has also stated that

[i]nherency does not embrace probabilities or possibilities

and that

[i]nherent anticipation requires that the missing descriptive material is “necessarily present,” not merely probably or possibly present, in the prior art.

Trintec Indus., Inc. V. Top-U.S.A. Corp, 295 F.3d 1292, 1297, 63 U.S.P.Q. 2d 1597 (Fed. Cir. 2002).

Appellant respectfully submits that the elements recited in the claims 6 and 21 might be probable or possible elements, but are not necessary elements. In other words, if components and relationships other than the elements recited in the claims could be used, then the doctrine of inherency does not apply.

First, the Examiner alleges, with documentary support, that “Bluetooth operates TDM”. Second, even if Bluetooth operates “TDM”, it does not necessarily follow that the communication module include a Bluetooth multiplexing/demultiplexing arrangement operatively connected to a translation unit. The Bluetooth multiplexing/demultiplexing arrangement might not be part of the communication module, for example, which might not be part of an interface unit, for example, as set forth in the pertinent claims.

For at least the above reasons, it is respectfully requested that the Board reverse the rejection based on the inherency doctrine or that the Board compel the Examiner to either produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, compel the Examiner to provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).



### **III. Group III: Claims 8 and 23**

Claims 8 and 23 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Bork patent.

The arguments made above in section I with respect to claims 1 and 16, from which claims 8 and 23 depend, respectively, are incorporated herein and made with respect to claims 8 and 23. For at least these reasons, the Board is urged to reverse the rejection with respect to claim 8 and 23.

In the Final Office Action at page 3, the Examiner alleges that “Re Claims 8, ..., 23, refer to Claim 1, USB operates in TDM bus, hence, it is inherent that the USB Device Controller to include a multiplexing and demultiplexing arrangement, USB Device Controller also inherently includes USB protocol stack to be connected to the Bluetooth USB Firmware”.

Appellant respectfully challenges the assertion that the elements in claims 8 and 23 in combination with claims 1 and 16, respectively, are all inherent. Appellant believes that the Examiner improperly applied the doctrine of inherency for the reasons stated above as set forth in Section II, which is incorporated herein in its entirety.

Appellant respectfully submits that the elements recited in the claims 8 and 23 might be probable or possible elements, but are not necessary elements. In other words, if components and relationships other than the elements recited in the claims could be used, then the doctrine of inherency does not apply.

First, the Examiner alleges, with documentary support, that “USB operates in TDM bus”. Second, even if “USB operates in TDM bus”, it does not necessarily follow that the system communication module includes a USB multiplexing/demultiplexing arrangement operatively connected to the translation unit and to the USB protocol stack. The Bluetooth multiplexing/demultiplexing arrangement might not be part of the system communication module, for example, which might not be part of an interface unit, for example, as set forth in the pertinent claims.

For at least the above reasons, it is respectfully requested that the Board reverse the rejection based on the inherency doctrine or that the Board compel the Examiner to either produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art,

compel the Examiner to provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

#### **IV. Group IV: Claim 9**

Claim 9 stands rejected under 35 U.S.C. § 102(e) as being anticipated by the Bork patent.

The arguments made above in section I with respect to claim 1, from which claim 9 depends, respectively, are incorporated herein and made with respect to claim 9. For at least these reasons, the Board is urged to reverse the rejection with respect to claim 9.

In the Final Office Action at page 3, the Examiner alleges that “Re Claims ... 9, ... refer to Claim 1, USB operates in TDM bus, hence, it is inherent that ... USB device controller inherently includes a configuration database to interpret plurality PC commands from plurality of host drivers”.

Appellant respectfully challenges the assertion that the elements in claim 9 in combination with claim 1 are all inherent. Appellant believes that the Examiner improperly applied the doctrine of inherency for the reasons stated above as set forth in Section II, which is incorporated herein in its entirety.

Appellant respectfully submits that the elements recited in the claim 9 might be probable or possible elements, but are not necessary elements. In other words, if components and relationships other than the elements recited in the claims could be used, then the doctrine of inherency does not apply.

First, the Examiner alleges, with documentary support, that “USB operates in TDM bus”. Second, even if “USB operates in TDM bus”, it does not necessarily follow that the system communication module includes a configuration database operatively connected to the USB multiplexing/demultiplexing arrangement. It is simply untrue that every system communication module must necessarily have a configuration database or any database for that matter.

For at least the above reasons, it is respectfully requested that the Board reverse the rejection based on the inherency doctrine or that the Board compel the Examiner to either produce references in support of the Examiner’s contention or, if the Examiner is

relying upon personal knowledge to support the finding of what is known in the art, compel the Examiner to provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

## **V. Group V: Claims 14 and 15**

Claims 14 and 15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Bork patent.

The arguments made above in section I with respect to claim 11, from which claims 14 and 15 depend, respectively, are incorporated herein and made with respect to claims 14 and 15. For at least these reasons, the Board is urged to reverse the rejection with respect to claims 14 and 15.

In the Final Office Action at page 3, the Examiner alleges that “Re Claims 14, 15, refer to Claim 1, 46 is coupled to 50 mobile wherein 50 includes Service/Function of other devices. Hence, it is inherent for the translator in 46 to recognize the service/function of other devices to protocol conversion wherein the predefined routines are device specific in the Bluetooth USB firmware”.

Appellant respectfully challenges the assertion that the elements in claims 14 and 15 in combination with claim 11 are all inherent. Appellant believes that the Examiner improperly applied the doctrine of inherency for the reasons stated above as set forth in Section II, which is incorporated herein in its entirety.

Appellant respectfully submits that the elements recited in the claims 14 and 15 might be probable or possible elements, but are not necessary elements. In other words, if components and relationships other than the elements recited in the claims could be used, then the doctrine of inherency does not apply.

Claim 14 recites, in part, “wherein the communicating with the device includes detecting a type of the device and connecting to the device in accordance with the first protocol”. It is not all necessary that a device detect a type of device. Some devices do not detect device types.

Claim 15 recites, in part, “wherein the translating includes selecting a translation routine from a set of predefined translation routines based upon the type of the device”.

First, claim 15 depends from claim 14. So if claim 14 is not inherent, then claim 15 is not inherent. Second, selecting a translation routing from a set of predefined translation routines is not always necessary. It is possible for there to be no selection of a translation routing and it is possible for there not to be predefined translation routines. Furthermore, for the selection to be based upon “the type of the device” is an extraordinary claim of inherency by the Examiner as there are assuredly other possible criteria for selecting a translation routine.

For at least the above reasons, it is respectfully requested that the Board reverse the rejection based on the inherency doctrine or that the Board compel the Examiner to either produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, compel the Examiner to provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

#### **VI. Group VI: Claims 7, 22 and 28**

Claims 7, 22 and 28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Bork patent.

The arguments made above in section I with respect to claims 1, 16 and 24, from which claims 7, 22 and 28 depend, respectively, are incorporated herein and made with respect to claims 7, 22 and 28. For at least these reasons, the Board is urged to reverse the rejection with respect to claims 7, 22 and 28.

In the Final Office Action at page 3, the Examiner alleges that “Re Claims 7, 22, 28, the USB device controller coupled to the inherently includes the USB protocol stack”.

Appellant respectfully challenges the assertion that the elements in claims 7, 22 and 28 in combination with claims 1, 16 and 24, respectively, are all inherent. Appellant believes that the Examiner improperly applied the doctrine of inherency for the reasons stated above as set forth in Section II, which is incorporated herein in its entirety.

Appellant respectfully submits that the elements recited in the claims 7, 22 and 28 might be probable or possible elements, but are not necessary elements. In other words,

if components and relationships other than the elements recited in the claims could be used, then the doctrine of inherency does not apply.

Claim 7 recites, in part, “wherein the system communication module further includes a USB protocol stack, the interface unit further including a USB interface operatively connected to the USB protocol stack”. It is not all necessary that a system communication module necessarily include a USB protocol stack. Claim 1 from which claim 7 depends is not so limited as to be used only with a USB protocol.

Claim 22 recites, in part, “wherein the system communication module further includes a USB protocol stack, the interface unit further including a USB interface operatively connected to the USB protocol stack”. It is not all necessary that a system communication module necessarily include a USB protocol stack. Claim 16 from which claim 22 depends is not so limited as to be used only with a USB protocol.

Claim 28, recites, in part, “wherein the system communication routine utilizes a USB protocol stack in processing information received from the electronic system and translated data received from the translation routine”. It is not at all necessary that a system communication routing always utilize a USB protocol stack. Claim 24 from which claim 28 depends is not so limited as to be utilize only a USB protocol stack.

For at least the above reasons, it is respectfully requested that the Board reverse the rejection based on the inherency doctrine or that the Board compel the Examiner to either produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, compel the Examiner to provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

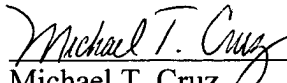
## **VII. Conclusion**

For the foregoing reasons, claims 1-28 are distinguishable over the prior art of record. Reversal of the Examiner’s rejection and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Dated: January 17, 2006

Respectfully submitted,

  
\_\_\_\_\_  
Michael T. Cruz  
Registration No. 44,636  
Attorney for Appellant

McANDREWS, HELD & MALLOY, LTD.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661  
Telephone: (312) 775-8084  
Facsimile: (312) 775-8100

## APPENDIX

The following claims are involved in this appeal:

1. An interface unit for effecting communication between a device and an electronic system, the interface comprising:

a device communication module for communicating with the device over a wireless link in accordance with a first protocol;

a system communication module for communicating with the electronic system using a second protocol; and

a translation unit, operatively connected to the device communication module and to the system communication module, for translating data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol,

wherein the electronic system does not have to be aware of the first protocol to be in communication with the device.

2. The interface unit of Claim 1 wherein the translation unit is further operative to translate information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

3. The interface unit of Claim 1 wherein the electronic system comprises a personal computer and the second protocol is a Universal Serial Bus protocol (USB), the interface unit being connected to a USB port of the personal computer.

4. The interface unit of Claim 1 wherein the device communication module includes a peripheral detection and connection module.

5. The interface unit of Claim 4 further including a Bluetooth interface operatively connected to the peripheral detection and connection module, the

communication module further including a Bluetooth protocol stack operatively connected to the Bluetooth interface.

6. The interface unit of Claim 1 wherein the communication module includes a Bluetooth multiplexing/demultiplexing arrangement operatively connected to the translation unit.

7. The interface unit of Claim 1 wherein the system communication module further includes a USB protocol stack, the interface unit further including a USB interface operatively connected to the USB protocol stack.

8. The interface unit of Claim 7 wherein the system communication module includes a USB multiplexing/demultiplexing arrangement operatively connected to the translation unit and to the USB protocol stack.

9. The interface unit of Claim 8 wherein the system communication module includes a configuration database operatively connected to the USB multiplexing/demultiplexing arrangement.

10. The interface unit of Claim 1 wherein the first protocol comprises the Bluetooth protocol and the second protocol comprises the USB protocol, the translation unit being further operative to translate information received from the electronic system in accordance with the USB protocol into translated information adapted for the device in accordance with the Bluetooth protocol.

11. A method for effecting communication between a device and an electronic system, the method comprising:

communicating with the device over a wireless link in accordance with a first protocol;

communicating with the electronic system using a second protocol, the electronic system not having to be aware of the first protocol to be in communications with the device; and

translating data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol.



12. The method of Claim 11 further including translating information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

13. The method of Claim 11 wherein the electronic system comprises a personal computer and the second protocol is a Universal Serial Bus protocol (USB), the method further including establishing a connection with a USB port of the personal computer.

14. The method of Claim 11 wherein the communicating with the device includes detecting a type of the device and connecting to the device in accordance with the first protocol.

15. The method of Claim 14 wherein the translating includes selecting a translation routine from a set of predefined translation routines based upon the type of the device.

16. A system for effecting communication with a device over a wireless link in accordance with a first protocol, the system comprising:

- a personal computer having an interface compliant with a second protocol; and

- an interface unit in communication with the personal computer through the interface, the interface unit including:

- a device communication module for transmitting information to, and receiving data from, the device in accordance with the first protocol;

- a system communication module for communicating with the personal computer using a second protocol; and

- a translation unit, operatively connected to the device communication module and to the system communication module, for translating the data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol,

wherein the personal computer does not have to be aware of the first protocol to be in communication with the device.

17. The system of Claim 16 wherein the translation unit is further operative to translate information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

18. The system of Claim 16 wherein the second protocol is a Universal Serial Bus protocol (USB), the interface including a USB port of the personal computer.

19. The system of Claim 16 wherein the device communication module includes a peripheral detection and connection module.

20. The system of Claim 19 further including a Bluetooth interface operatively connected to the peripheral detection and connection module, the communication module further including a Bluetooth protocol stack operatively connected to the Bluetooth interface.

21. The system of Claim 16 wherein the communication module includes a Bluetooth multiplexing/demultiplexing arrangement operatively connected to the translation unit.

22. The system of Claim 16 wherein the system communication module further includes a USB protocol stack, the interface unit further including a USB interface operatively connected to the USB protocol stack.

23. The system of Claim 22 wherein the system communication module includes a USB multiplexing/demultiplexing arrangement operatively connected to the translation unit and to the USB protocol stack.

24. A computer-readable storage medium containing code for controlling an interface unit disposed to effect communication between a device and an electronic system, comprising:

a device communication routine for controlling communication with the device over a wireless link in accordance with a first protocol;

a system communication routine for controlling communication with the electronic system using a second protocol; and

a translation routine for translating data received from the device in accordance with the first protocol into translated data adapted for the electronic system in accordance with the second protocol,

wherein the electronic system does not have to be aware of the first protocol to be in communication with the device.

25. The storage medium of Claim 24 wherein the translation routine is further operative to translate information received from the electronic system in accordance with the second protocol into translated information adapted for the device in accordance with the first protocol.

26. The storage medium of Claim 24 wherein the device communication routine includes a peripheral detection and connection routine.

27. The storage medium of Claim 26 wherein the device communication routine utilizes a Bluetooth protocol stack in processing the data received from the device.

28. The storage medium of Claim 25 wherein the system communication routine utilizes a USB protocol stack in processing information received from the electronic system and translated data received from the translation routine.